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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,249	08/31/2006	Tetsuya Chikatsune	Q96751	8302

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EXAMINER	
LAO, MARIALOUISA	
ART UNIT	**PAPER NUMBER**
1621	

MAIL DATE	DELIVERY MODE
11/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,249	CHIKATSUNE ET AL.	
	Examiner	Art Unit	
	M. Louisa Lao	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/31/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: in page 7 second para. line 5, Applicants recite "wal/l", where it may have been intended to be "wall". Applicants are further encouraged to ascertain and correct the specification for other typographical and grammatical errors.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka Shinichi et al. (JP08-141386, JP`386) in view of Tatani Atsushi et al. (JP11128612, JP`612).

6. The instant claims are drawn to a method for extracting slurry by extracting slurry from an agitation vessel having a bottom face and a side wall and housing the slurry, characterized in that the slurry is extracted from an open end of a slurry extraction tube provided at the side wall of the agitation vessel in a direction toward the interior of the agitation vessel. The said method, wherein the slurry flows in the agitation vessel, and a normal line direction of a surface of the open end of the slurry extraction tube is in a direction of an angle with respect to a downstream direction of a flow of the slurry of 0° or more and less than 90°. Said slurry is extracted through a decompression valve to a vessel under a pressure lower than the agitation vessel and using a pump.

7. JP`386 teaches a method of removing slurry by allowing slurry to flow into a removing pipe (3) provided at the bottom of a stirring tank, where said pipe has its inner opening end (4) projecting upward from the tank bottom (see purpose and figure). JP`386 teaches the use of a pump (5) in the figure. JP`386 teaches in claim 4 that the slurry is terephthalic acid in water or an acetic acid solution.

8. The difference between the instant claims and JP`386 is the location of the tube. In the instant claims, the extraction tube projects inwards from the side wall of the tank, while JP`286 has the removing tube projecting inwards from the bottom of the tank.

9. JP`612 is relied upon to show that a device was taught at the time of the invention, with a tube at a side wall of a tank enabling slurry in tank to flow out by head differential (see Solution). JP`612 teaches that the tube at the side wall is angled (see Figure).

10. The difference between the instant claims and the combination of the teachings of the cited prior art references would make the difference unpatentable. This difference would have been obvious, at the time of Applicants' invention was made, to one of ordinary skill in the art since this adaptation of one location of the extraction tube relative to another would have been within the technical grasp of the artisan, with a reasonable expectation that the extraction tube would have the utility intended. Further, the instant angles are obvious to one of ordinary skill in the art to provide the fluid turbulence expected in the motion of a fluid when encountering an obstacle, as in the instant extraction tube.

The claim would have been obvious because " a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product, not of innovation, but of ordinary skill and common sense.

The Supreme Court in *KSR* noted that if the actual application of the technique had been beyond the skill of one of ordinary skill in the art, then the resulting invention would not have been obvious because one of ordinary skill could not have been expected to achieve it.

11. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka Shinichi et al. (JP08-141386, JP`386) in view of Tatani Atsushi et al. (JP11128612, JP`612) as applied to claims 1-2 and 6-8; and further in view of Katzschmann et al. (US3594414, US`414).

12. JP`386 in view of JP`612 for the rejection of claims 1-2 and 6-8 has been made of record above.

13. The instant claims have been discussed above. Said terephthalic acid is obtained through the hydrolysis of dimethyl terephthalate.

14. US`414 is relied upon to teach the production of terephthalic acid from the hydrolysis of dimethyl terephthalate (see column 1 lines 32-38).

15. One of ordinary skill in the art at the time of the invention would have found it obvious to utilize the method of extracting slurry of JP`386 and of JP`612 for the slurry of terephthalic acid made from the hydrolysis of dimethyl terephthalate of US '414, since the artisan of ordinary skill would have reached a reasonable expectation of success of extracting the terephthalic acid slurry with the methods of JP`386 in view of JP`612.

In applying known technique to a known device (method, or product) ready for improvement to yield predictable results, the claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art.

The Supreme Court in *KSR* noted that if the actual application of the technique had been beyond the skill of one of ordinary skill in the art, then the resulting invention would not have been obvious because one of ordinary skill could not have been expected to achieve it.

16. No claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MLouisa Lao whose telephone number is 571-272-9930. The examiner can normally be reached on Mondays to Thursdays from 8:00am to 8:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have

questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ROSALYND KEYS/
PRIMARY EXAMINER
ART UNIT 1621

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for YVONNE EYLER
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